

REMARKS

Introductory Comments

As of the mailing date of the 01/30/2009 Office Action, claims 1, 4-10, 13-15, 17, 18, and 21 pending in the present application. In the present Amendment, claims 1, 18, and 21 have been amended, leaving claims 1, 4-10, 13-15, 17, 18, and 21 for consideration upon entry of the present Amendment. The claims have been amended as explained below. Reconsideration and allowance of the claims is respectfully requested in view of the foregoing amendments and following remarks.

Claim Amendments

Claims 1, 18, and 21 have been amended to substitute “made from” for “comprising” in the phrase “a fibrous substrate comprising a tissue furnish”. As acknowledged by the Office, this amendment is supported by page 7, lines 20-24 of the application as filed.

Claim 1 has been further amended to state that it is the bathroom tissue or facial tissue that has “(i) at least one strength region . . . and (ii) at least one dispersibility region”. Support for this amendment can be found, at least, in claim 1 and page 12, lines 18-24 of the application as filed.

Claims 1, 18, and 21 have been further amended to delete “polyvinyl amines”.

Applicants are not conceding in this application that the amended claims would not have been patentable without the current amendments. The present claim amendments are intended only to facilitate expeditious allowance of valuable subject matter. Applicants respectfully reserve the right to present and prosecute the original versions of amended claims in one or more continuing applications.

Claim Rejections Under 35 U.S.C. § 112, Second Paragraph

Claims 1, 4-10, 13-15, 17, 18, and 21 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly

claim the subject matter which applicant regards as the invention. 01/30/2009 Office Action, page 3, paragraph no. 3. Applicants respectfully traverse these rejections to the extent they may be applicable to the claims as currently amended.

The Office Action states,

Claims 1, 18 and 21 recite "a fibrous substrate comprising a tissue furnish." The instant Specification (p 7, lines 20-24) discloses that the fibrous substrate is a paper sheet made from a suitable paper slurry (furnish), which can be a tissue furnish. A paper sheet is typically made by draining a paper slurry to form the sheet, during which most of the water and usually a portion of the solids in the slurry are removed. It is not clear how the claimed fibrous substrate comprises a tissue furnish, or paper slurry, when the formation thereof considerably changes the composition of the original furnish.

The remaining Claims depend from and thus inherit the indefiniteness of Claim 1.

01/30/2009 Office Action, page 3, last two paragraphs.

Applicants have amended claims 1, 18, and 21 to substitute "made from" for "comprising" in the phrase "a fibrous substrate comprising a tissue furnish". In view of these amendments, Applicants respectfully request the reconsideration and withdrawal of the rejection of claims 1, 4-10, 13-15, 17, 18, and 21 under 35 U.S.C. § 112, second paragraph.

Anticipation or Obviousness Rejections over Lindsay

Claims 1, 5-10, 13-15, 18, and 21 stand rejected under 35 U.S.C. § 102(e) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a), as obvious over Lindsay et al. (6824650). 01/30/2009 Office Action, page 4, paragraph no. 4. Applicants respectfully traverse these rejections to the extent they may be applicable to the claims as currently amended.

U.S. Patent No. 6,824,650 to Lindsay et al. (hereinafter "Lindsay") generally describes textile materials, including paper webs, treated with a polyvinylamine polymer

and a second agent that interacts with the polyvinylamine polymer. Lindsay abstract. The second agent added with the polyvinylamine polymer can be, for instance, a polymeric anionic reactive compound or a polymeric aldehyde-functional compound. *Id.* In an alternative embodiment, the polyvinylamine polymer and the second polymer can be applied to a textile material for increasing the affinity of the textile material for acid dyes. *Id.*

Applicants respectfully assert that claims 1, 5-10, 13-15, 18, and 21 are neither anticipated by nor obvious over Lindsay because Lindsay requires the use of a polyvinylamine polymer, whereas the present claims exclude such use.

Anticipation requires that all of the limitations of the claim be found within a single prior art reference. *Scripps Clinic & Research Foundation v. Genentech, Inc.*, 927 F.2d 1565, 1576 (Fed. Cir. 1991). “Because the hallmark of anticipation is prior invention, the prior art reference – in order to anticipate under 35 U.S.C. § 102 – must not only disclose all elements of the claim within the four corners of the document, but must also disclose those elements “arranged as in the claim.”” *Net MoneyIn v. Verisign*, No. 2007-1565, slip op. at 15, 2008 WL 4614511 at *8, (Fed. Cir. 2008) (*quoting Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983)).

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). Establishing a prima facie case of obviousness requires that all limitations of the claim be taught or suggested by the prior art. *See, e.g., CFMT, Inc. v. Yieldup Intern. Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003); *In re Royka*, 490 F.2d 981, 985 (C.C.P.A. 1974).

As presently amended, Applicants’ independent claims 1, 18, and 21 define “the reacted cationic strength agent or the reacted nonionic strength agent” via a Markush group that excludes Lindsay’s required “polyvinylamine polymer”. Because Lindsay requires a “polyvinylamine polymer”, Lindsay fails to teach or suggest the use of a composition excluding such a polymer. Accordingly, Lindsay does not anticipate or render obvious independent claims 1, 18, and 21, and these claims are patentable over

Lindsay. Claims 5-10 and 13-15, which each depend ultimately from and further limit claim 1, are also neither anticipated by nor obvious over Lindsay.

Claim 15 is further patentable over Lindsay. Claim 15 requires that the bathroom tissue or facial tissue further comprise a reacted strength reducing material. With respect to claim 15, the Office states, “Lindsay et al discloses that a debonder can be applied to the web to lower the dry strength without a large decrease in wet strength, thus the debonder is a reacted strength reducing material (col. 19, lines 33-36)”. 01/30/2009 Office Action, page 7, first paragraph. Applicants respectfully assert that Lindsay’s debonder is not a “reacted strength reducing material” because it does not chemically react with the fibrous substrate. Note, in particular, that Lindsay’s “debonders” are “quaternary ammonium compounds with alkyl or lipid side chains” and thus would not be expected to chemically react with the a fibrous substrate. Claim 15 is therefore further patentable over Lindsay.

For all of the above reasons, Applicants respectfully request the reconsideration and withdrawal of the rejection of claims 1, 5-10, 13-15, 18, and 21 under 35 U.S.C. § 102(b) as anticipated by, or under 35 U.S.C. § 103(a) as obvious over Lindsay.

Obviousness Rejections over Lindsay + Drelich

Claims 14 and 17 stand rejected under 35 U.S.C. § 103(a), as unpatentable over Lindsay in view of Drelich et al. (3665775). 01/30/2009 Office Action, page 7, paragraph no. 5. Applicants respectfully traverse these rejections to the extent they may be applicable to the claims as currently amended.

Lindsay is described above.

Drelich generally describes a resin binder composition comprising: (1) a synthetic resin; (2) a water-soluble, polymeric, carboxylic thickener; and (3) a metal ammine complex coordination compound capable of releasing ions of said metal to control the total migration of the resin binder during its deposition on a fibrous web. Drelich abstract. Drelich is cited for

teach[ing] that well known printed bonding patterns applied to flushable fibrous webs include interconnecting or interlocking grids comprising straight or wavy lines extending transversely or diagonally across the webs and additionally, if desired, along the web (Abs; col 2, lines 24-30 and 42-46; col. 17, lines 15-18).

01/30/2009 Office Action, page 7, fourth paragraph.

Applicants respectfully assert that claims 14 and 17 are patentable over Lindsay in view of Drelich because Lindsay and Drelich collectively fail to teach or suggest treatment of a fibrous substrate with a composition that excludes Lindsay's required "polyvinylamine polymers". Claims 14 and 17 each depend ultimately from and further limit claim 1. As described above, Lindsay requires the use of a "polyvinylamine polymer", whereas claim 1 excludes the use of such a polymer. Adding Drelich, which is cited for its teaching of particular printed bonding patterns, does not remedy the deficiency of Lindsay because Drelich does not provide any reason (let alone as sufficient reason) to modify Lindsay by excluding Lindsay's required "polyvinylamine polymer". Lindsay and Drelich therefore collectively fail to support a prima facie case of obviousness against claims 14 and 17. Applicants therefore respectfully request the reconsideration and withdrawal of the rejection of claims 14 and 17 under 35 U.S.C. § 103(a) over Lindsay in view of Drelich.

Obviousness Rejections over Sheppard + Champaigne + Chen '234 + Chen '679 + Oriaran + Drelich

Claims 1, 4-6, 9, 10, 13-15, 17, 18, and 21 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Sheppard et al. (3702610) in view of Champaigne Jr. et al. (3616797) and further in view of Chen et al. (6436234 and 6261679) and Oriaran et al. (6017418), as evidenced by Drelich. 01/30/2009 Office Action, pages 7-8, paragraph no. 6. Applicants respectfully traverse these rejections to the extent they may be applicable to the claims as currently amended.

Drelich is described above.

U.S. Patent No. 3,702,610 to Sheppard et al. (hereinafter “Sheppard”) generally describes a means for indicating when a sanitary napkin or diaper wrapped with a web bonded with a spaced pattern of water-dispersible adhesive is in condition for flushing away after it is dropped in a toilet for disposal. Sheppard abstract. The indicating means is provided by including a water-soluble coloring agent or dye in the water-dispersible adhesive composition. *Id.* As his water dispersible adhesive (which is also described as a “water soluble adhesive), Sheppard teaches polyvinyl alcohol (column 2, line 24; column 3, line 29; column 3, line 47), as preferred, with “polyvinyl methylether, glycol cellulose, cellulose glycolate, methyl cellulose and the like” being taught as less preferred alternatives (column 3, lines 50-52).

U.S. Patent No. 3,616,797 to Champaigne Jr. et al. (hereinafter “Champaigne”) is similar to Sheppard in that it generally relates to sanitary napkins and diapers. Champaigne abstract. Champaigne describes a flushable wrapper for such products. *Id.* The wrapper comprises a non-woven fiber web bonded by a water-soluble adhesive and overprinted with another binder comprising a spaced pattern of water-soluble adhesive. *Id.* Champaigne’s preferred water-soluble adhesive is polyvinyl alcohol, with “polyvinyl methyl ether, glycol cellulose, cellulose glycolate, methyl cellulose and the like” being taught as less preferred alternatives (column 4, lines 24-27).

U.S. Patent No. 6,436,234 to Chen et al. (hereinafter “Chen ‘234’”) generally describes paper sheets useful for tissues, paper towels, napkins, disposable absorbent products. Chen ‘234 abstract. The sheets can be made to exhibit a high degree of wet resiliency by using a combination of high yield pulp fibers and a wet strength agent in an uncreped throughdrying process. *Id.*

U.S. Patent No. 6,261,679 to Chen et al. (hereinafter “Chen ‘679’”) generally describes a fibrous absorbent structure that is wet stable and has large void volume with a density below the critical density of the fiber employed. Chen abstract. The wet-stable, high void volume fibrous absorbent can be used in a disposable product intended for the absorption of fluid such as body fluid, including extensible absorbent articles. *Id.*

Oriaran generally describes hydrophilic, humectant, soft, pliant, single-ply or multiply absorbent papers in the form of napkin, towel, bathroom tissue or facial tissue. Oriaran abstract. In the present Office Action, Oriaran is cited for

disclos[ing] single- or multi-ply fibrous absorbent paper products in the form of napkin, towel, bathroom tissue or facial tissue (Abs). As a bathroom tissue, the paper product is inherently water dispersible. Oriaran et al discloses many of the claimed polymers for use as temporary wet strength agents (Abs; col 16, lines 35-44; col 18, lines 15-26).

01/30/2009 Office Action, page 11, first full paragraph.

The Office Action states, in relevant part,

It would have been obvious to one of ordinary skill in the art to make facial tissues or bathroom tissues from the fibrous webs of Sheppard et al in view of Champaigne Jr. et al and further in view of Chen et al ('234 and '679) and Oriaran et al as typical water dispersible tissue products. Making the product from a tissue furnish would have been obvious. . . . It would further have been obvious to use the temporary wet strength agents taught by Chen et al or Oriaran et al. as the water soluble binders and the permanent wet strength agents as the overprinted permanent strength binders in the embodiment taught by Sheppard et al and Champaigne Jr. et al. . . .

01/30/2009 Office Action, paragraph bridging pages 11-12.

Applicants respectfully assert that claims 1, 4-6, 9, 10, 13-15, 17, 18, and 21 are patentable over Sheppard in view of Champaigne and further in view of Chen '234, Chen '679, and Oriaran, as evidenced by Drelich because the Office has not provided a reason for a person of ordinary skill in the art to have contradicted the express teachings of Sheppard and Champaigne by employing the temporary wet strength agents of Chen '679 or Oriaran in place of the water soluble adhesives of Sheppard and Champaigne.

The Supreme Court has recently reaffirmed the principle that "a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the art". *KSR Int'l. Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741 (2007). The Court further stated that "it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the

elements in the way the claimed new invention does”. *Id.* Furthermore, while the *KSR* decision may have eliminated any rigid requirement for application of the teaching-suggestion-motivation test (TSM test), it did not disturb the longstanding principle that “a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984).” MPEP 2141.02 (emphasis in original).

The Office’s proposed modification starts with Champaigne and Sheppard and states, in relevant part, that “[i]t would further have been obvious to use the temporary wet strength agents taught by Chen et al or Oriaran et al. as the water soluble binders and the permanent wet strength agents as the overprinted permanent strength binders in the embodiment taught by Sheppard et al and Champaigne Jr. et al.” However, this proposed modification does not support a *prima facie* case of obviousness for at least two reasons: first, it ignores the express teachings of Sheppard and Champaigne to use water soluble adhesives that are outside the scope of Applicants’ claims; and second, it does not provide a sufficient reason for a skilled person to have replaced the water soluble adhesives of Sheppard and Champaigne with different polymers having different functions as taught by Chen ‘679 and Oriaran.

On the first point, note that Sheppard teaches polyvinyl alcohol as his preferred water soluble adhesive (column 2, line 24; column 3, line 29; column 3, line 47), with “polyvinyl methylether, glycol cellulose, cellulose glycolate, methyl cellulose and the like” being taught as alternatives to polyvinyl alcohol (column 3, lines 50-52). Champaigne similarly prefers polyvinyl alcohol as his water-soluble adhesive (column 2, lines 39-40 and 66; column 3, line 2; column 4, lines 7 and 19; column 4, line), with “polyvinyl methyl ether, glycol cellulose, cellulose glycolate, methyl cellulose and the like” being taught as alternatives to polyvinyl alcohol (column 4, lines 24-27). Therefore, the only water-soluble adhesives taught by Sheppard and Champaigne are outside the scope of Applicants’ reacted cationic or reacted nonionic strength agent, and a person of ordinary skill in the art would have to contradict the express teachings of Sheppard and Champaigne to substitute a different polymer taught by Chen ‘679 or Oriaran.

On the second point, Chen '679 or Oriaran do not provide a sufficient reason for the proposed substitution. The Office has not established that any of the reacted cationic or reacted nonionic strength agents of Applicants' claims is described by Chen '679 or Oriaran as a "water soluble adhesive", which is the term used by Sheppard and Champaigne. Nor has the Office established that any of the reacted cationic or reacted nonionic strength agents of Applicants' claims is chemically similar to the adhesives taught in Sheppard and Champaigne. Note also that Chen distinguishes between "crosslinkers" and "adhesives". Chen '679, column 21, lines 52-55. The fact that certain polymers recited in Applicants' claims as reacted cationic or reacted nonionic strength agents are taught in Chen '679 or Oriaran as temporary wet strength agents is not a sufficient reason for a person of ordinary skill in art to substitute them for the chemically dissimilar water soluble adhesives of Sheppard and Champaigne.

In short, Sheppard and Champaigne teach specific polymers as their water-soluble adhesives, and Chen '679 and Oriaran do not provide a sufficient reason to replace these specific polymers with chemically dissimilar polymers from Chen '679 and Oriaran that are not described as adhesives. Thus, Chen '679 and Oriaran do not support the proposed modification of Sheppard and Champaigne, and a prima facie case of obviousness has not been established. Applicants therefore respectfully request the reconsideration and withdrawal of the rejection of claims 1, 4-6, 9, 10, 13-15, 17, 18, and 21 under 35 U.S.C. § 103(a) over Sheppard in view of Champaigne and further in view of Chen '234, Chen '679, and Oriaran, as evidenced by Drelich.

Obviousness Rejections over Sheppard + Champaigne + Chen '234 + Chen '679 + Oriaran + Srinivasan

Claims 6 and 14 stand rejected under 35 U.S.C. § 103(a) over Sheppard in view of Champaigne and further in view of Chen '234, Chen '679, Oriaran, and even further in view of Srinivasan (3913579). 01/30/2009 Office Action, page 13, paragraph no. 7.

Sheppard, Champaigne, Chen '234, Chen '679, and Oriaran are described above.

U.S. Patent No. 3,913,579 to Srinivasan et al. (hereinafter “Srinivasan”) generally describes a sanitary napkin that includes a flushable absorbent pad and an extremely flushable nonwoven fibrous cover that is bonded with a totally water-soluble resinous binder. Srinivasan abstract.

Applicants respectfully assert that claims 6 and 14 are patentable over Sheppard in view of Champaigne and further in view of Chen ‘234, Chen ‘679, Oriaran, and even further in view of Srinivasan, because the cited references do not provide a sufficient reason to substitute the wet strength agents of Chen ‘679 and Oriaran for the water soluble adhesives of Sheppard and Champaigne. Claims 6 and 14 each depend ultimately from and further limit claim 1. As explained above, claim 1 is patentable over the combination of Sheppard, Champaigne, Chen ‘234, Chen ‘679, and Oriaran because Sheppard and Champaigne teach water soluble adhesive polymers that are outside the scope of Applicants’ reacted cationic or reacted nonionic strength agents, and Chen ‘679 and Oriaran do not provide a sufficient reason to substitute their chemically dissimilar strength agents for the water soluble adhesive polymers of Sheppard and Champaigne. Thus, claims 6 and 14 are patentable over the combination of Sheppard, Champaigne, Chen ‘234, Chen ‘679, and Oriaran. Adding Srinivasan, which is cited for the use of an insoluble hot melt adhesive in a particular pattern, does not change this conclusion because Srinivasan does not provide any reason (let alone a sufficient reason) to substitute the strength agents of Chen ‘679 and Oriaran for the water soluble adhesives of Sheppard and Champaigne. Accordingly, Sheppard, Champaigne, Chen ‘234, Chen ‘679, Oriaran, and Srinivasan do not support a prima facie case of obviousness against claims 6 and 14. Applicants therefore respectfully request the reconsideration and withdrawal of the rejection of claims 6 and 14 under 35 U.S.C. § 103(a) over Sheppard, Champaigne, Chen ‘234, Chen ‘679, Oriaran, and Srinivasan.

Obviousness Rejections over Sheppard + Champaigne + Chen ‘234 + Chen ‘679 + Oriaran + Sun

Claims 7 and 8 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Sheppard in view of Champaigne and further in view of Chen ‘234, Chen ‘679, Oriaran, and even further in view of Sun (6322665).

Sheppard, Champaigne, Chen ‘234, Chen ‘679, and Oriaran are described above.

U.S. Patent No. 6,322,665 to Sun et al. (hereinafter “Sun”) generally describes methods for making high wet performance webs, the methods including applying polymeric anionic reactive compound heterogeneously to a cellulosic fibrous web followed by curing of the compound to crosslink the cellulose fibers. Sun abstract.

Applicants respectfully assert that claims 7 and 8 are patentable over Sheppard in view of Champaigne and further in view of Chen ‘234, Chen ‘679, Oriaran, and even further in view of Sun because the cited references do not provide a sufficient reason to substitute the wet strength agents of Chen ‘679 and Oriaran for the water soluble adhesives of Sheppard and Champaigne. Claims 7 and 8 each depend ultimately from and further limit claim 1. As explained above, claim 1 is patentable over the combination of Sheppard, Champaigne, Chen ‘234, Chen ‘679, and Oriaran because Sheppard and Champaigne teach water soluble adhesive polymers that are outside the scope of Applicants’ reacted cationic or reacted nonionic strength agents, and Chen ‘679 and Oriaran do not provide a sufficient reason to substitute their chemically dissimilar strength agents for the water soluble adhesive polymers of Sheppard and Champaigne. Thus, claims 7 and 8 are patentable over the combination of Sheppard, Champaigne, Chen ‘234, Chen ‘679, and Oriaran. Adding Sun, which is cited for teaching tissue webs comprising patterns of polymeric strength agents, does not change this conclusion because Sun does not provide any reason (let alone a sufficient reason) to substitute the strength agents of Chen ‘679 and Oriaran for the water soluble adhesives of Sheppard and Champaigne. Accordingly, Sheppard, Champaigne, Chen ‘234, Chen ‘679, Oriaran, and Sun do not support a prima facie case of obviousness against claims 7 and 8. Applicants therefore respectfully request the reconsideration and withdrawal of the rejection of

claims 6 and 14 under 35 U.S.C. § 103(a) over Sheppard, Champaigne, Chen '234, Chen '679, Oriaran, and Sun.

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance is respectfully requested.

It is believed that all the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130 maintained by Applicants' Attorneys.

Respectfully submitted,

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